

WHAT THE INVENTION CLAIMED IS:

1. A method to extend enzyme activity is to conduct cross-linking reaction on enzymes extracted from natural plants, organic acids and polysaccharides by hitting them with electron beam. The networked cross-linked polymers produced in the process protect the enzymes by covering the enzymes inside the polymers, so the enzymes are hard to decompose under highly acidic condition. Due to increased activity and stability, the enzymes in human alimentary canal have extended activity and residence time.

2. As described in claim 1 for a method to extend the enzyme activity, the organic acids include Lactic acid, Malic acid or Tartaric acid.

3. As described in claim 1 for a method to extend the enzyme activity, the polysaccharides include 1,4 (-2-amino-2-deoxy- β -D-glucan), Acidify starch or Polygluco-mannose.

4. As described in claim 1 for a method to extend the enzyme activity, the organic acids, the polysaccharides and the enzymes undergo 15 ~ 25kgy electron beam treatment for 10 ~ 30 minutes. Then the molecules are cross-linked to cover the enzymes inside networked cross-linked polymers.